
Christchurch West Melton Water Management Zone Committee AGENDA

Notice of Meeting:

A meeting of the Christchurch West Melton Water Management Zone Committee will be held on:

Date: Thursday 23 May 2019
Time: 6pm
Venue: Environment Canterbury,
200 Tuam Street

Membership

Chairperson	Arapata Reuben - Tūāhuriri Rūnanga
Members	Kevin Brown - Community Representative
	Helen Caley - Community Representative
	Annabelle Hasselman - Community Representative
	Gareth Oddy - Community Representative
	Carly Sluys - Community Representative
	Abbie Wilson - Community Representative
	Councillor Pauline Cotter - Christchurch City Council
	Councillor Tom Lambie - Environment Canterbury
	Councillor Debra Hasson - Selwyn District Council
	Herewini Banks - Te Hapū o Ngāti Wheke/Rapaki
	Les Wanhalla - Te Taumutu Rūnanga

If you require access to the Environment Canterbury building after 6pm, please phone Lesley Woudberg at the number below

15 May 2019

Zone Facilitator
Lesley Woudberg
Zone Facilitator
Tel: 027 706 4273
Environment Canterbury

Principal Advisor
Diane Shelander
Senior Policy Analyst
Tel: 941 8304
Christchurch City Council

Committee Advisor
Liz Ryley
Tel: 941 8153
Christchurch City Council

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Karakia Whakamutunga

The meeting will be opened with a Karakia/Timatanga and closed with a Karakia/Whakamutunga

1. Apologies

At the close of the agenda no apologies had been received.

2. Confirmation of Previous Minutes

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on [Thursday, 28 March 2019](#) be confirmed (refer page 5).

3. Matters Arising from the Minutes

4. Deputations by Appointment

There were no deputations by appointment at the time the agenda was prepared.

5. Identification of Urgent Items

6. Identification of General Public Contributions



Christchurch West Melton Water Management Zone Committee OPEN MINUTES

Date: Thursday 28 March 2019
Time: 6.06pm
Venue: Environment Canterbury,
200 Tuam Street

Present

Chairperson	Arapata Reuben - Tūāhuriri Rūnanga
Members	Kevin Brown - Community Representative
	Helen Caley - Community Representative
	Annabelle Hasselman - Community Representative
	Gareth Oddy - Community Representative
	Councillor Tom Lambie - Environment Canterbury
	Herewini Banks - Te Hapū o Ngāti Wheke/Rapaki
	Les Wanhalla - Te Taumutu Rūnanga

In Attendance: ECan - Lesley Woudberg, Gillian Jenkins, Ruth Larsen, Steve Firth; Cherry Red – Jackie Curtis; DOC – John Benn

28 March 2019

Zone Facilitator
Olivia Smith
Zone Facilitator
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Environment Canterbury

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www.ecan.govt.nz/news-and-notice/minutes/Pages/Default.aspx

Arapata Reuben opened the meeting with a Karakia/Timatanga.

The agenda was dealt with in the following order.

7. Zone Committee Election of Chairperson, Deputy Chairperson and Regional Representative

1. The Committee Advisor called for nominations for the position of Chairperson.
Chairperson
 - Les Wanhalla nominated Arapata Reuben, seconded by Herewini BanksThere being no other nominations, Arapata Reuben was elected as Chairperson.
2. The Chairperson called for nominations for the following positions.
Deputy Chairperson
 - Les Wanhalla nominated Kevin Brown, seconded by Herewini BanksThere being no other nominations, Kevin Brown was elected as Deputy Chairperson.
3. Regional Representative
 - Kevin Brown nominated Les Wanhalla, seconded by Tom LambieThere being no other nominations, Les Wanhalla was elected as Regional Representative.

Committee Resolved CWZC/2019/00001

That the Christchurch West Melton Water Management Zone Committee:

1. Elect:
 - Arapata Reuben as Chairperson for 2019
 - Kevin Brown as Deputy Chairperson for 2019
 - Les Wanhalla as Regional Representative for 2019.

Les Wanhalla/Herewini Banks

Carried

1. Apologies

Committee Resolved CWZC/2019/00002

That apologies from Abbie Wilson, Councillor Cotter, Councillor Hasson and Carly Sluys be accepted.

That an apology from Gareth Oddy for lateness be accepted.

Note: An apology from Diane Shelander, Principal Advisor.

Arapata Reuben/Kevin Brown

Carried

2. Confirmation of Previous Minutes

Committee Resolved CWZC/2019/00003

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on Thursday, 22 November 2018 be confirmed.

Les Wanhalla/Herewini Banks

Carried

3. Matters Arising from the Minutes

Nil.

4. Deputations by Appointment

There were no deputations by appointment.

5. Identification of Urgent Items

Nil.

6. Identification of General Public Contributions

Nil.

8. Ravensdown - Verbal Update

Ravensdown representatives, Lauren Kensington and Peter Hay attended the meeting.

Lauren, Peter and Zone Committee member, Helen Caley, provided a verbal update, and power point presentation, to the Zone Committee.

Information was provided about the Ravensdown site, development and its products that are blended and distributed to South Island stores. Discussion was held about the stormwater system that is being built onsite.

Improvements were noted about the storage and management of products onsite.

The presenters responded to questions of clarification from Zone Committee members, including about onsite testing, installation of truck washes to prevent material being dropped offsite, and the use of trade waste for water.

Zone Committee member, Les Wanhalla, suggested the company promote copper free brake pads on trucks. Information about this will be forwarded to Ravensdown.

Gareth Oddy arrived at 7.02pm during discussion about the three Immediate Steps applications.

9. Immediate Steps Projects - Audits and Applications

Committee Comment

1. Greg Stanley, Biodiversity Officer for Environment Canterbury reported on the audits of current Immediate Steps projects, for Kowhai Sanctuary, Styx River Esplanade and Ōtukaikino Wetland.
2. Greg displayed a power point and outlined each project and the work being carried out and proposed. Points noted included:
 - a. Work on the Kowhai Sanctuary includes annual planting days in association with students of West Melton School.
 - b. The Styx River Esplanade is a site open to the public, with a mown access way.
 - c. The Ōtukaikino Wetland is a recent application delivered by the Department of Conservation and Lamb & Hayward. The Friends of Ōtukaikino carry out a planting and weeding programme.

Greg explained that the key to a successful project includes an ongoing commitment from an individual/group, regular maintenance, ongoing monitoring, appropriate plant sourcing and professional planting techniques.

3. The three Immediate Steps applications were noted:
 - a. Ngātata Farm Restoration Project \$46,000
 - b. Kowhai Sanctuary \$30,665
 - c. Styx River/Brooklands Trapping \$5,220
4. Les Wanhalla suggested applicants should be made aware that IMS is a partnership and install signage which identifies the site as an Immediate Steps Biodiversity Immediate Project.
5. Discussion was held about the three applications that were outlined in the report, from page 9 of the agenda. It was noted that Ngātata Farm was under new ownership.

Committee Resolved CWZC/2019/00004

That the Christchurch West Melton Water Management Zone Committee:

1. Receive the verbal update on progress with auditing existing Immediate Steps biodiversity projects.
2. Recommend that funding be allocated from the 2018/2019 and 2019/2020 Immediate Steps Funds to three Immediate Steps project applications:

a. Ngātata Farm Restoration Project	\$46,000
b. Kowhai Sanctuary	\$30,665
c. Styx River/Brooklands Trapping	\$5,220

Arapata Reuben/Les Wanhalla

Carried

10. Zone Delivery - Quarterly Update

Committee Comment

1. Steve Firth advised that this was his final meeting as Zone Delivery Lead. He introduced Ruth Larsen to the Committee who will act in this role in the interim.
2. Steve spoke to the quarterly report. He asked for feedback on the layout of the report, that was for the period to December 2018.
3. Steve responded to questions from Zone Committee members about the work being carried out and outlined the recent on the spot infringement pilot undertaken.

Committee Resolved CWZC/2019/00005

That the Christchurch West Melton Water Management Zone Committee:

1. Receive the Zone Delivery – Quarterly Update report.

Arapata Reuben/Kevin Brown

Carried

11. Christchurch City Council - Draft Annual Plan Process 2019-20

Committee Comment

1. This report provides the Zone Committee with an opportunity to discuss the Christchurch City Council's Draft Annual Plan 2019-20, and note any matters members would wish to have raised by the Zone Committee's Elected Member representative during the Christchurch City Council's Draft Annual Plan deliberations.
2. Olivia referred to two matters raised previously by past Zone Committee member, Suzanne Furkert. These were about maintenance access structures, and CCC's Long term Plan proposal for a walkway along the Ōpāwaho Heathcote River.
3. Matters noted by the Committee were:
 - a. More investigation on climate change – sea level rise.
 - b. Further investment on a work programme to reduce wastewater overflow.
 - c. Investigate options for the targeted removal of sediment in the Ōpāwaho/Heathcote River to improve water quality.
 - d. Establish a public platform for sharing baseline waterway data between Environment Canterbury and the Christchurch City Council.
 - e. Acknowledge an increase in funding by the Christchurch City Council for the implementation of the global stormwater consent and the drinking water programme.
 - f. Assurance from CCC that there is funding for the regular maintenance of recreation structures on the Ōpāwaho/Heathcote River.

Committee Resolved CWZC/2019/00006

That the Christchurch West Melton Water Management Zone Committee:

1. Note the information in the report.

Arapata Reuben/Kevin Brown

Carried

12. Zone Facilitator's Update - 19 March 2019

Committee Comment

1. Olivia advised that the Chair presented the Christchurch West Melton Zone Committee's Annual Report today to the Christchurch City Council. An opportunity had been raised for the relevant Council staff and Zone Committee representative to present to the Council's Infrastructure, Transport and Environment Committee regarding the Drylands Park project.
2. Olivia reminded members about the "Under Our Feet" field trip, taking place this Saturday 30 March, and on Saturday 6 April. Please inform Olivia if you are able to attend.
3. Discussion was held about the previous nitrate presentation that Kevin Brown had presented to the Committee. Kevin suggested writing to the Minister of Health to reinforce the importance of investigation in the research of the correlation between nitrate levels and colorectal cancer.
4. Olivia advised that Ngāi Tahu Farming were keen to present to the Committee in May.
5. Olivia tabled a draft 2019 Zone Committee Action Plan and asked for feedback from members about any gaps or changes they noted. Annabelle noted that in the draft conditions for the CCC global stormwater consent there is a condition which identifies the Zone Committee as having a community engagement role in the development of the stormwater management plan for the Ōpawaho –Heathcote River. This should be noted in the Zone Committee's Action Plan.
6. Olivia informed members that this was her final meeting in her role as Zone Facilitator.

Committee Resolved CWZC/2019/00007

That the Christchurch West Melton Water Management Zone Committee:

1. Note the upcoming events and updates.
2. Receive the paper on the 2019 Omnibus Plan Change.
3. Provide initial feedback on the DRAFT 2019 Zone Committee Action Plan as noted.
4. Write to the Ministry of Health to reinforce the importance of investigation in the research of the correlation between nitrate levels and colorectal cancer.

Arapata Reuben/Herewini Banks

Carried

Members agreed to cancel the April meeting as it was scheduled to occur on the evening before Good Friday, and given that they were undertaking two field trips instead.

On behalf of the Zone Committee members, Arapata wished both Olivia and Steve well for their future.

Arapata Reuben closed the meeting with a Karakia/Whakamutunga.

Meeting concluded at 8.05pm.

CONFIRMED THIS 23RD DAY OF MAY 2019

**ARAPATA REUBEN
CHAIRPERSON**

7. Correspondence

Reference: 19/528685

Presenter(s): Lesley Woudberg, Zone Facilitator
(Timing for item – 5 minutes)

1. Purpose of Report

- 1.1 The purpose of this report is for the Christchurch West Melton Water Management Zone Committee to note the correspondence sent on behalf of the Committee to Hon Dr David Clark on research on nitrate in drinking water and colorectal cancer risk.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Note the correspondence sent to Hon Dr David Clark on research on nitrate in drinking water and colorectal cancer risk.

3. Key Points

- 3.1 The Zone Committee was provided with an update and presentation by Committee member, Kevin Brown, Groundwater Working Group on 27 September 2018 relating to the interzone groundwater issue and nitrates. The Committee at that time had the opportunity to provide feedback to the Waimakariri District Council's Draft Zone Implementation Programme Addendum.
- 3.2 At the Zone Committee meeting on 28 March 2019 discussion was held about the previous nitrate presentation that Kevin had presented. At that time Kevin suggested writing to the Minister of Health to reinforce the importance of investigation in the research of the correlation between nitrate levels and colorectal cancer.
- 3.3 The attached correspondence has been produced as a result of those previous discussions.

Attachments

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Christchurch West Melton Water Zone Committee

15 April 2019

The Hon Dr David Clark
Minister of Health

Tēnā koe Hon Dr Clark

Re: Research on nitrate in drinking water and colorectal cancer risk.

The Christchurch West Melton Zone Committee is a joint committee established by Environment Canterbury, Christchurch City Council, and Selwyn District Council. The committee includes community members, and rūnanga and council representatives. Its role is to help deliver the Canterbury Water Management Strategy and make recommendations to councils about the management of freshwater.

Recently the zone committee discussed research on the correlation between low nitrate levels in drinking water and the occurrence of colorectal cancer. The discussion focused on the findings of several studies, including one led by Aarhus University, Denmark:

Schullehner, J., Hansen, B., Thygesen, M., Pedersen, C.B. and Sigsgaard, T. (2018). Nitrate in drinking water and colorectal cancer risk: a nationwide population-based cohort study. *International Journal of Cancer*, 143: 73-79.

The committee were concerned about the findings of the research given the current nitrate concentrations in many of Canterbury's public and private drinking water supplies. The study identified a statistically significant cancer correlation with nitrate concentrations as low as 3.9 mg/L compared to the WHO (and NZ) drinking water guideline of 50 mg/L.

We acknowledge that further conclusive research is needed to determine the correlation between nitrate levels and colorectal cancer, and therefore the appropriateness of the current 'Maximum Acceptable Value' (MAV) for nitrate in drinking water.

We recognise that New Zealand's bowel cancer rates are among the highest in the world. The committee would like to know if the Ministry of Health have a programme of work focused on this research, and if so, how this research will be used to determine the appropriateness of MAV for nitrate. If not, the committee would like to see the Ministry of Health work with research institutes to prioritise studies on the relationship between nitrate levels and colorectal cancer in New Zealand.

This research is of national interest and it is critical that we understand the risks that nitrate levels pose to our communities in New Zealand.

Nāku noa, nā



Arapata Reuben
Chair of the Christchurch West Melton Zone Committee
Email: Arapata.Reuben@ngaitahu.iwi.nz

8. Community Water Partnership Activities

Reference: 19/524062

Presenter(s): Clive Appleton, Team Leader Natural Environment, CCC)
(Timing for item – 15 minutes)

1. Purpose of Report

- 1.1 The purpose of this report is to discuss recent activities initiated by the Christchurch City Council as Part of the Community Water Partnership.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Receive the update on the Community Water Partnership Activities.
2. Provide advice on how to share information about the gold fish competition.

2. Report

Clive Appleton will attend the zone committee meeting to discuss the following:

- **Fish for Gold Initiative**

You may have spotted some blue fish near stormwater drains around the CBD recently - these are part of a new initiative to increase awareness about stormwater and the importance of only putting rain in drains. Clive will provide an update on the project, including an upcoming 'Fish for Gold' competition.



Example of a blue fish on Tuam Street

- **Research - The relationship between community engagement in urban waterway management and community well-being**

Christchurch City Council engaged the Waterways Centre for Freshwater Management to review the published international literature on collaborative community management of urban water resources in order to: highlight the social, cultural, economic and environmental benefits that communities can derive from participation in collaborative management efforts; and present examples of monitoring frameworks or key indicators used to measure the contribution of such engagement and collaboration for community well-being. The research report is now available, and Clive will briefly speak to the key findings and significance of this work.

- **Community Water Partnership Charter** – Clive will provide a brief update on the development of the charter.

Attachments

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A ↓	Fish for Gold	17

Have you seen the blue fish?



They are sitting next to drains all around the city
to remind us that the water from our roads
washes straight into the river.

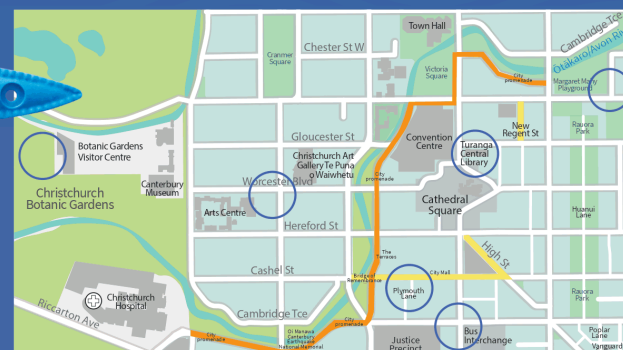
We need your help to stop the fish getting sick!

Find out how to help at
kidsfest.co.nz/event/fishforgold

Fish for **GOLD** and win!

We've hidden **six golden fish** around Christchurch CBD.
Find four of them and tell us where they are for your
chance to win! There's some clues in the map below.
Prizes include:

- Fishing packages from Hunting and Fishing
- Free swim passes at Council pools
- Family passes to Orana Wildlife Park and Willowbank Wildlife Reserve, Macpac outdoor gear and more



Enter at kidsfest.co.nz/event/fishforgold
Terms and conditions apply

ORANA
WILDLIFE PARK

Willowbank
your kiwi guarantee

Christchurch
City Council

9. Ngāi Tahu Farming - Implementing Good Management Practices

Reference: 19/524117

Presenter(s): Shane Kelly, General Manager Dairy, Ngāi Tahu Farming
(Timing for item – 45 minutes)

1. Purpose of Report

- 1.1 The purpose of this report is to provide the Christchurch West Melton Water Management Zone Committee with an overview of how Ngāi Tahu Farming are implementing Good Management Practices (GMP) on farm to minimise the impact of farming activities on the environment.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Receive the verbal briefing by Ngāi Tāhu Farming on Good Management Practices.

2. Report

- 2.1 In February 2019, the Zone Committee had a workshop to discuss key items for the Committee's 2019 work programme. One suggestion was to gain an improved understanding on how GMP is being implemented on farms. This was of particular interest to the Zone Committee given the nutrient reductions required in the Waimakariri zone as a result of the Waimakariri ZIP Addendum process and the upcoming sub-regional plan change. A Ngāi Tahu Farming representative will attend the meeting to discuss this with the Committee.

Attachments

There are no attachments to this report.

10. Update from Committee Members on Zone Activities

Reference: 19/528120

Presenter(s): Lesley Woudberg, Zone Facilitator
(Timing for item – 15 minutes)

1. Purpose of Report

- 1.1 The purpose of this report is to receive verbal updates from Zone Committee members on recent events which they have attended.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Consider the feedback from the 'What's Happening Under Our Feet Field Trip' and discuss ideas for further engagement opportunities for 2019.
2. Receive briefings on the recent Farm Audit Field Trip, Regional Committee Meeting and Waterwise Hui.

3. Report

- 3.1 In late March/early April the Zone Committee hosted two public field trips with over 70 Christchurch residents. The field trips were focused on understanding Christchurch's groundwater system, the city's water supply and urban waterway challenges. The field trips were held in collaboration with staff from the Waterways Centre for Freshwater Management, Christchurch City Council and Environment Canterbury. Kevin Brown was a lead speaker for the Zone Committee on both trips.
- 3.2 Field trip participants were asked to provide feedback and the responses were overwhelmingly positive (refer to the quotes below and the attachment). People thoroughly appreciated the opportunity to attend the field trips and found that seeing things in reality was a useful way to learn and digest information. The trip proved to be an effective way to increase people's knowledge of water issues and raise awareness about the work of the Zone Committee.
- 3.3 *"Thank you so much for the opportunity to come on this field trip, I enjoyed it immensely! I thought that in general the idea of bringing people out and showing them first hand where our drinking water comes from is brilliant! The fact that there was plenty of time for questions was great well, especially with sensitive issues like the chlorination of the water."*
- 3.4 *"To be placed at the riverbank of the Waimakariri and then follow a drop of water through the processes to my city home tap, with all the considerations needed to supply that valuable resource, became to be seen by me as a privilege, rather than a right. That it can arrive clean and drinkable, by means of careful control and considerations of protecting the water environment by the combined Council and ECAN / Engineering interests is remarkable. I got a lot more than I expected. Thank you again, for giving up your time and putting so much effort into the event."*
- 3.5 There is appetite for further field trips later in the year and some participants suggested topics for future trips. These included:
 - *Something similar on groundwater for the Selwyn district covering the impact of the Central plains Water and the issues around the Selwyn River catchment.*

- *Christchurch waterways...their sources, ecological states, trends, future plans, flow augmentation (by wells or other means), protection and beautification.*
- *The Christchurch City stormwater and wastewater networks and their challenges.*
- *How urban waterways are monitored and how residents can do monitoring and actions to improve water quality.*
- *Local history on past troublesome events (e.g. old landfills, contaminated sites, inappropriate land uses) and how they were/can be overcome?*

3.6 The Zone Committee are encouraged to discuss the above suggestions and think about engagement activities for the rest of 2019.

Attachments

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Feedback from What's Happening Under Our Feet Fieldtrip

30th March & 6th April 2019

Summary: The feedback below is consistent with that which people provided verbally on the trips. Overall, attendees thoroughly enjoyed and appreciated the opportunity to attend the fieldtrips. The journey told a logical story which people could understand. The knowledge and openness of the speakers was greatly appreciated, along with the opportunities to ask questions. The timeframe was suitable and the diversity in sites, particularly with the urban component, made the trip interesting. There is appetite for further fieldtrips- seeing things in reality is an effective way for people to learn and digest information. The trip was attended by many people who already have an interest/knowledge of water management. If the trip was to be run again in the future, advertising could focus on telling the story in media that the general public engage with. The trip was an effective way to increase public awareness about the role and work of the zone committee and was a great example of collaboration with the Centre of Freshwater Management, Christchurch City Council and Environment Canterbury.

	30 th March	6th April
1. What was the best thing about the fieldtrip?	<ul style="list-style-type: none">– Being on the bus together with such good knowledgeable guides, going around a well-planned pathway to meet the objective of understanding freshwater issues in the Zone. Good handouts. Not too short, not too long.– I learnt a lot about Christchurch groundwater.– I thought the trip was well planned, with very knowledgeable presenters working as a great tag team.– This trip is hands down better than any of the meetings I attended of the Zone Committee.– Having appropriate ZC, UC, CCC and ECan staff on hand to provide info. Bridgett and Sophie's inputs were brilliant!– A very comfortable bus to ride in and the duration of 6 hours was about right and a great choice of location for lunch.– The knowledge of the tour leaders & of others on the trip. It was also nice that there was no cost involved & seeing eels at the end of the trip was a nice bonus.– Relaxed atmosphere, sharing of knowledge and the group participation. I want to congratulate Leo for way he shared information, yet still facilitate the participation from the (different interest groups / organisations).– Good things were the way everything was organized. I appreciated the portable sound system. The explanation & demonstrations of water flow below surface. The use of time on the comfortable bus.– Visiting sites that showed the changes in SW/GW levels as we progressed downslope from Halkett - made it all very real and reinforced learning– Handout provide great context and reference info - essential to understand just where we were each time and historical context– I like how the 'burning questions' were solicited up front and then addressed as we went along– Thank you so much for the opportunity to come on this field trip, I enjoyed it immensely! It's hard to pinpoint one thing I thought was best about the trip, but I thought that in general the idea of bringing people out and showing them first hand where our drinking water comes from is brilliant! The fact that there was	<ul style="list-style-type: none">– I acquired a broad understanding of how the water flows work.– A genuine heartfelt thanks to Leo and the team. They did a great job and appreciated their openness and frankness in answering every question to the best of their knowledge. It was a good learning experience which I would recommend to anyone with even a modicum of interest in the water issues that face Christchurch. That we were all able to remain as a single group throughout the exercise. Had it been larger, that would have been jeopardized. Think you should retain optimum size. Enjoyed the 'hands on' experience in that we were able to see and experience some of the challenges as well as triumphs involved in supplying Christchurch's water. Appreciated the maps, etc., we were given to enable us to understand the aquifers as well as the overall geography and key locations. Well done.– Good coverage of the river and groundwater relationships and character of the groundwater system– I learnt a lot over the whole day, but I most enjoyed the 2 final stages at Redwood Springs and Bells Creek, which reflects my own particular interest in urban waterways.– There were many highlights during the trip, one came after another. The welcome, access to key knowledgeable people, the reference to a well bound handout, most comfortable coach, consideration to safety and wellbeing, even fruit and muffins! To be placed at the riverbank of the Waimak and then follow a drop of water through the processes to my city home tap, with all the considerations needed to supply that valuable resource, became to be seen by me as a privilege, rather than a right. That it can arrive clean and drinkable, by means of careful control and considerations of protecting the water environment by the combined Council and ECan / Engineering interests is remarkable. It also pointed out how fragile and venerable our water eco system and the gentle (on the day we were there) Waimak, can at times roar, may the new stop banks do a good job! May the protection of the zone above the aquifers be monitored and controlled. Overall, the interaction/ questions / observation of key spots of interest, was well presented. I got a lot more than I expected. Thank you again, for giving up your time and putting so much effort into the event.– Well organised and sequenced trip, well done.

Feedback from What's Happening Under Our Feet Fieldtrip

30th March & 6th April 2019

	<p>plenty of time for questions was great well, especially with sensitive issues like the chlorination of the water.</p> <ul style="list-style-type: none">– Thank you so much for this enlightening excursion, and the time invested by everybody involved to make this happen!– I loved seeing the artisan water at the redwood site! So cool and what a great spot for lunch! I think there was a great variety including heading out Linwood way and looking at the stormwater.	
<p>2. What could be improved for future fieldtrips?</p>	<ul style="list-style-type: none">– I cannot think of anything. I thought it ran like clockwork despite the time pressures.– If the trip was slightly longer - until 4.30 or 5 pm - it would have given more time to cover the questions raised (& to visit all of the intended places!)– Time. Increase the time allocated or, either reduce the planned spots to visit or solicit questions before the trip and cover this in the discussions or discuss questions on the bus.– Perhaps a little explanation about the Zone committee(s), its objectives, how it operates, how it is chosen. Could be in the Handout.– Would be great to add to handout that multi coloured crosssectional view of lower Wiamakairiri (showed aquitards etc)– A lot of work went into the handouts, highly appreciated, perhaps offer this in an electronic format before the meeting, saving the trees!– If time is critical deliver explanations on the bus as we travel– I would say it was just the right amount of time! Less time at the first stop so we didn't have to skip one during the day. Keep the visits at each site to 30 minutes in length.	<ul style="list-style-type: none">– It'd be good to know the qualifications/roles of all the presenters and commentators. For balance, some more information about waste water - challenges and potential solutions.– Wasn't that much. Limitations in standing outside of key areas (Grampion Street pump-station and the water purification at the Heathcote). Would be great that in future we have access to these facilities to enable us to do more than stand outside a locked gate. (I realise that these were both construction sites at this point of time but would anticipate that will change if you do something similar next year.– More info on the city GW supply scheme, i.e. number of bores, depths, water quality differences, collection and distribution system. More info on stormwater quality and quantity and treatments. More info on climate change impacts and adaptation/mitigation.– I thought things were pitched well for a general audience - perhaps the only thing I could think of is there were some early problems with the PA on the bus. Otherwise, all good.– I find it hard to fault the program / transport / distance travelled / presentations. 6 hours is a long time to keep the group focused, but it seemed that was achieved. I would not shorten the program.– Toilet stop at larger facilities may be more helpful if the numbers increase. (That's all I can come up with)– Perhaps not surprisingly, my only suggestion is to add to the handout pack a diagram of the cross section of the unconfined aquifer 'braided' gravels and perhaps a photo from one of those enormous gravel cliffs in the river sections below the gorges illustrating the same formations.
<p>3. Are there other areas/topics that you would be interested in learning more about?</p>	<ul style="list-style-type: none">– Something similar on groundwater for the Selwyn district covering the impact of the CPW and the issues around the Selwyn River catchment (Maybe too big for just one trip)– Something on Christchurch waterways...their sources, future plans, flow augmentation (by wells or other means), protection and beautification.– The Christchurch City stormwater and wastewater networks and their challenges.– Irrigation schemes & their impact.– Waste water management, some good work is done by the CCC - perhaps visit to the waste water treatment process.	<ul style="list-style-type: none">– My particular interest is in urban waterways - how these are monitored, what residents can do to help improve things. I live near Dudley Creek, so that, St Albans Stream, Shirley Stream are of particular interest.– Stormwater and Surface water flows, water and sediment quality/contamination and ecological health status and trends.– Local history on past troublesome events and how they were overcome, or will be? (Some of this was covered in the trip)– NZ National impact on ECAN/ CCC projects and policies (restrictions imposed if any? Water treatment etc.)– The team's, passions and concerns for the future.

Feedback from What's Happening Under Our Feet Fieldtrip

30th March & 6th April 2019

	<ul style="list-style-type: none">– All the other Zones especially the Hurunui-Waiiau– Options for Community monitoring of freshwater quality– If we ever got the chance, getting a tour of the water bottling plant	<ul style="list-style-type: none">– I would be interested in learning more about the various irrigation schemes through out Canterbury and who manages them, owns them and uses them.
<p>4. How did you find out about the trip? Do you have any suggestions about how we could advertise it?</p> <p>The fieldtrips were advertised on social media, through the CWMS mailing list and invites to community boards and councillors.</p>	<ul style="list-style-type: none">– I would imagine that if the field trip were to be widely promoted it could run for months which would be a big demand on ECan staff. Was it promoted on the various ECan Facebook sites?– ECO email - it would be worth adding future trips to WEA emails & perhaps advertising it in the local free paper ("Star" etc), or on the Neighbourly site.– Found out through Alison Bower Networking for the Environment at ECAN and was able to pass it on through the ECO Canterbury Environmental Network. I am sure if you advertised through the WEA and U3A and put it in Community Newspapers it would be double booked.– My interest was sparked last year by attendance of talks at Lincoln Uni on water in the Selwyn catchment area including Lake Waihora. An impressive amount amount of research is going on.– Advertise with U3A and community groups via local (free) newspapers for older participants. Ask younger people which social media they use to get their info– By being a member of NOTIS (Network Of The Ilam Stream). Have you advertised in local newspapers? How about staff giving talks to U3A groups and Probus?– I personally heard about the trip through the Styx Living Laboratory Trust network.– I heard about it through my colleague Murray Doak who also came along who I believed found out about it through Leo.	<ul style="list-style-type: none">– Through the Styx Living Lab communication network. Short of arranging another mass infection event I think increasing attendance will always be an up-hill battle.– Did notice that there would have been room for more. Indeed, advertising is going to be crucial in future. I do not know how you advertised this. I came along (and invited some others) because Leo had told me about it. I did not see it advertised. I am not a Christchurch ratepayer (being in the Selwyn district) but wonder if it could have been (or was?) advertised on the water-bill people receive.– Send invite to all community enviro/conservation groups requesting them to send out to members and networks.– I am on an ECan mailing list and jumped at the chance. Our local community board have a weekly newsletter (I presume they all do) that might be a good outlet.– Can I suggest a photo and short article in the suburban news papers and the Star about the recent field trip. Possibility of mentioning there will be one again same time next year, then follow-up article 5-6 weeks before the next one.

11. Facilitator's Update - 23 May 2019

Reference: 19/528328

Presenter(s): Lesley Woudberg, Zone Facilitator
(Timing for item – 30 minutes)

1. Purpose of Report

- 1.1 The purpose of this report is to inform the Christchurch West Melton Water Management Zone Committee of upcoming events and relevant updates.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Note the upcoming events and updates.

2. Report

a) Recent Events

Event	Who	Comment
Mother of all Clean Ups 11 May	Public	This event is jointly organised by the Avon/Otakaro River Network, the Opawaho/Heathcote River Network, the Estuary Ihutai Trust, Cassells Tannery and City Care, and is supported by Christchurch City Council, the RATA Foundation and Environment Canterbury. Approx. 35 Community groups including Residents Associations, sports groups, church groups etc have registered to clean up 35 sites.
Planting Otukaikino – Fish & Game 10am Shipleys Rd Saturday 11 May	Public	Organised by North Canterbury Fish & Game
Willows Recreation Reserve opening (ECan Waimakariri River Reserve team) 11:30am Thompsons Rd (off Old West Coast Rd) Saturday 11 May	Public	Organised by Environment Canterbury

b) Upcoming Events – Visit www.ecocanterbury.org.nz

Event	Who	Comment
Charlesworth Street Reserve – Community Planting 19 May at 10:00 am - 12:00 pm	Public	Visit www.ecocanterbury.org.nz for more info.

Dr Jane Goodall – Rewind the Future 30 May at 7:30 pm - 10:00 pm Purchase Tickets online at Ticketek.co.nz.	Public	Dr Goodall will speak about devoting her life to making a difference for all, and the power of individual action to enable us to change the course of time. Focus on - climate change, environmental degradation, poverty, and global conflict.
Braided Rivers Seminar 2019 26 June at 8:30 am - 5:00 pm	Public	Free and it is recommended you register early as this day books out.
Mahoe-nui Winter Planting Days – Lower Site 29 June at 9:15 am - 11:30 am Mahoe-nui Reserve Lower Site Evans Pass Road	Public	Planting 300 trees
Planting day – Cashmere Stream Care Group 10:00 – 12noon Westmorland East Valley Sunday 30 June	Public	Contact for more info cashmerestreamcaregroup@gmail.com

c) Updates

Update on Copper Brake Pad Remit

Local Government New Zealand have confirmed that copper is being considered as part of the Government's Essential Freshwater Policy work and is being considered as a new attribute in the National Objectives Framework. They advised that the Government is aware of the need for national regulation to deal with copper and MFE officials are talking with other parts of government to try to advance this. A further update will be provided to the Committee as more information becomes available.

National Stormwater Conference

The New Zealand National Stormwater Conference was held on 1 to 3 May in Auckland. The team from the University of Canterbury won an innovation award for the STORMINATOR. This has sparked a lot of interest in the STORMINATOR device across New Zealand. Jenny Watters (ECan Zone team) and Michele Stevenson (ECan Scientist) did a presentation at the Conference about the work they are doing in Addington Brook.

Winter Grazing Remote Sensing Project

FAQ's about the project are attached.

Attachments

No.	Title	Page
A ↓	Attachment - Winter Grazing	29
B ↓	Updated action tracker at 14 May 2019	31



The winter grazing remote sensing project

Update for Christchurch West Melton Zone Committee.

May 2019

What is the winter grazing remote sensing project?

This winter Environment Canterbury is looking at the location and extent of winter grazing on farms across Canterbury, using available satellite photos. As a science project it will be run by Manaaki Whenua (Landcare Research) with the analysis proved to Environment Canterbury later in the year. It follows on from a similar pilot project run during the winter of 2016.

Why is it being done?

Better information on winter grazing will help us improve our plans and rules and in turn reduce the impact of the activity on waterways. The information will help the implementation of the winter grazing rules in Plan Change 5 (Nutrient Management). It will also improve the accuracy of catchment-wide nutrient modelling.

Why not ask farmers directly for the information?

We could have run a voluntary survey but are very aware of how busy farmers already are. A voluntary survey is also unlikely to be as accurate as a random survey.

How do you know the information is accurate?

The interpretation of the satellite photos will be checked on the ground at a small number of sites, working in advance with land-owners to seek permission and help them understand the scope and intent of the project.

What will happen with the information from individual farms?

The project is about understanding and modelling nutrient loads at the catchment level and while it uses information from individual farms, the data will be collated and aggregated for the analysis and modelling work.

Could this sort of information be used in the future for compliance and monitoring?

Yes – this technology is already here and publicly available – and is complementary to Environment Canterbury's existing compliance, monitoring and enforcement (CME) regime.

New technology such as this should reduce the cost of CME to both ratepayers and farmers, while at the same time improving environmental outcomes.

Why now?

The project is part of ongoing work to improve the efficiency of Environment Canterbury's compliance, monitoring and enforcement activities. Our approach over the past decade has been to encourage the adoption of farming good management practices, focus on monitoring higher risk activities and repeat offenders (rather than monitoring every consent), reward good operators (reduced monitoring), as well the use of new technology and systems.

Is there anything I need to do?

No – and you will be asked in advance for your permission if your property is a good site for ground-checking. If you say no, we will respect that and find another location.

Where do I get more information?

If you have a question about the science project contact Brodie.Young@Ecan.govt.nz or if you want to know about compliance contact Paul.Hulse@Ecan.govt.nz.

Committee	Status	Meeting Date	Report Title / Agenda Section	Resolution	Action Notes
Christchurch West Melton Water Management Zone Committee	DUE AUG 2019	27/09/2018	Update on Stage 3 of the Rapanui-Shag Rock Cycleway	1. This update did not go ahead at this time. Staff will provide an update at a future meeting when more complete information on the Rapanui-Shag rock Cycleway project is available.	13 May 2019 - Revised Target Date changed by: Liz Ryley From: 21 Jun 2019 To: 05 Aug 2019 - Reason: Further information is unavailable at this time. Environmental Impact Assessments are being undertaken. Staff have advised that Environment Impact Assessments are being carried out, expected to be completed late July. We will schedule an update to the Committee when further information is available.
Christchurch West Melton Water Management Zone Committee	DUE JUN 2019	28/03/2019	Zone Facilitator's Update - 19 March 2019	That the Christchurch West Melton Water Management Zone Committee: 1. Note the upcoming events and updates. 2. Receive the paper on the 2019 Omnibus Plan Change. 3. Provide initial feedback on the DRAFT 2019 Zone Committee Action Plan as noted. 4. Write to the Ministry of Health to reinforce the importance of investigation in the research of the correlation between nitrate levels and colorectal cancer.	04 Apr 2019 - Forwarded to Zone Facilitator for action on the Draft 2019 Zone Committee Action Plan, and on a letter to the Ministry of Health relating to investigation of the correlation between nitrate levels and colorectal cancer.
Christchurch West Melton Water Management Zone Committee	DUE JUN 2019	28/03/2019	Immediate Steps Projects - Audits and Applications	That the Christchurch West Melton Water Management Zone Committee: 1. Receive the verbal update on progress with auditing existing Immediate Steps biodiversity projects. 2. Recommend that funding be allocated from the 2018/2019 and 2019/2020 Immediate Steps Funds to three Immediate Steps project applications: a. Ngātata Farm Restoration Project \$46,000 b. Kowhai Sanctuary \$30,665 c. Styx River/Brooklands Trapping \$5,220	03 Apr 2019 - Action forwarded to Zone Facilitator to ensure the allocation of IS funding.